> d his

(FILE 'HOME' ENTERED AT 14:05:33 ON 18 JUN 2002)

	FILE 'CAPLUS' ENTERED AT 14:05:50 ON 18 JUN 2002
L1	638587 S CYSTEINE OR METHIONINE OR AMINO ACID# OR HOMOCYSTEINE
L2	327555 S SULFID? OR PYRIT? OR MARCASIT? OR CHALCOPYRIT? OR BORNIT? OR
L3	819636 S LEACH? OR DISSOL? OR EXTRACT?
L4	228 S L1 AND L2 AND L3
L5	147946 S CYSTEINE OR METHIONINE OR HOMOCYSTEINE
L6	132 S L5 AND L4

WEST Search History

DATE: Tuesday, June 18, 2002

Set Name side by side	Hit Count	Set Name result set					
DB=USPT,PGPB,JPAB,EPAB,DWPI; PLUR=YES; OP=ADJ							
L21	14 and 15 and 117 and L20	42	L21				
L20	11 or 119	876	L20				
L19	t adj ferrooxidans or t adj thiooxidans	113	L19				
L18	ore same 117 same 15	13	L18				
L17	18 or 114	179822	L17				
L16	114 same 17 same 15	6	L16				
L15	((423/\$)!.CCLS.) and L14	1	L15				
L14	homocysteine	1880	L14				
L13	110 and L12	1	L13				
L12	((435/262)!.CCLS.)	685	L12				
L11	((423/\$)!.CCLS.) and L10	15	L11				
L10	18 same 17 same 15	339	L10				
L9	18 same 17 same 14	1648	L9				
L8	12 or amino adj acid	179494	L8				
L7	14 or pyrite or marcasite or chalcopyrite or bornite or covelline	111098	L7				
L6	12 same 14 same L5	83	L6				
L5	leach\$4 or dissol\$5 or extract\$4	1390962	L5				
L4	sulfid\$3	107454	L4				
L3	11 and L2	49	L3				
L2	cysteine or methionine	48564	L2				
L1	thiobacillus	866	L1				

END OF SEARCH HISTORY

WEST Search History

DATE: Tuesday, June 18, 2002

Set Name side by side	Query	Hit Count	Set Name result set
DB=USOC; PLUR=YES; OP=ADJ			
L9	((423/\$)!.CCLS.) and L8	. 4	L9
L8	11 and 12 and extract\$4	449	L8
L7	((423/\$)!.CCLS.) and L6	13	L7
L6	11 and 12 and dissol\$5	680	L6
L5	11 and 12 and leach\$4	36	L5
L4	11 and 12 and (leach\$4 or dissol\$5 or extract\$4)	769	L4
L3	leach\$4 or dissol\$5 or extract\$4	293083	L3
L2	sulfid\$3 or pyrite or marcasite or chalcopyrite or bornite or covelline	35429	L2
L1	amino adj acid or cysteine or methionine or homocysteine	8413	L1

END OF SEARCH HISTORY

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ANSWER 12 OF 132 CAPLUS COPYRIGHT 2002 ACS
L6
    2000:98845 CAPLUS
AN
    132:154724
DN
    Leaching of sulfide-containing materials with
ΤI
    microorganisms and use of sulfur-containing amino acids
    in leaching with microorganisms
    Rojas-Chapana, Jose; Tributsch, Helmut
IN
    Hahn-Meitner-Institut Berlin G.m.b.H., Germany
PA
SO
    PCT Int. Appl., 15 pp.
    CODEN: PIXXD2
DT
    Patent
LΑ
    German
    ICM C22B003-18
T.C.
    54-2 (Extractive Metallurgy)
CC
FAN.CNT 1
                                          APPLICATION NO. DATE
    PATENT NO.
                     KIND DATE
    _____ ____
                           _____
                                          -----
                                          WO 1999-EP5272 19990723
PI
    WO 2000006785
                    A1
                           20000210
        W: AU, US, ZA
        RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
            PT, SE
    DE 19836078
                      A1
                           20000210
                                          DE 1998-19836078 19980730
    DE 19836078
                      C2
                           20020418
    AU 9951636
                                          AU 1999-51636
                                                           19990723
                      A1
                           20000221
    AU 745470
                           20020321
                      B2
PRAI DE 1998-19836078 A
                           19980730
    WO 1999-EP5272 W
                           19990723
    The inventions relates to an effective and environmentally friendly method
AΒ
    for leaching of sulfide-contg. materials, esp.
    sulfide ores (e.g., pyrite, marcasite,
    chalcopyrite, bornite, covellin) with
    microorganisms. S-contg. amino acids or their derivs.
    are added to the aq. leaching liq. The invention also relates
    to the use of S-contg. amino acids or their derivs. in
    the leaching of sulfide-contg. materials with
    microorganisms, esp. the leaching of pyrite.
ST
    leaching sulfide ore microorganism; biol
    leaching sulfide ore
ΙT
    Leaching
        (biol.; of sulfide ores with microorganisms)
ΙT
    Acidithiobacillus ferrooxidans
    Microorganism
        (leaching of sulfide ores with)
    52-90-4, Cysteine, uses 63-68-3, Methionine, uses
IT
    RL: MOA (Modifier or additive use); USES (Uses)
        (in leaching of sulfide ores with microorganisms)
IT
    1308-56-1, Chalcopyrite, processes 1308-82-3, Bornite
    1309-36-0, Pyrite, processes 1317-66-4, Marcasite
    50642-52-9, Covellin
    RL: PEP (Physical, engineering or chemical process); PROC (Process)
        (leaching of sulfide ores with microorganisms)
             THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT
RE
(1) Tuovinen, O; ARCHIEVES OF MICROBIOLOGY 1975, V105(2), P123 CAPLUS
(2) Zimmerley; US 2829964 A 1958 CAPLUS
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